Congress of the United States
Washington, DC 20515

April 15, 2015

The Honorable Charles F. Bolden, Jr.,
Administrator
National Aeronautics and Space Administration
300 E. Street, SW
Washington, DC 20024-3210

Dear Administrator Bolden:

Due to the immediacy of threats to the clean drinking water supply for nearly half a million people in Lake Erie's Western Basin, we write in support of the continuation of the Remote Sensing of Harmful Algal Blooms (HAB) in Lake Erie project directed by NASA Glenn Research Center in response to critical water quality problems in our region. This project is a vital mission to our planet, and Lake Erie's vulnerability to nutrient and sediment run-off is presenting serious challenges to scientists and stakeholders, with implications for locations well beyond this watershed.

The need for HAB research, data collection, and on-going monitoring was elevated in the eyes of the public, governing bodies, and the scientific community by the events of August 2014, when people in the Toledo, Ohio municipal water service area were unable to drink their water for three consecutive days. In response to the crisis, NASA GRC scientists generously expanded the agency's program in August and September; NASA employs cutting-edge science in the service of protecting public drinking water supplies, by embarking on early alert data sets, for the 11 million people who depend on Lake Erie as their freshwater source.

Working with partners including the National Oceanic and Atmospheric Administration (NOAA), The University of Toledo, Kent State University, Michigan Tech Research Institute, Bowling Green State University, OhioView, Central State University, and the Naval Research Lab, the leadership at NASA GRC is developing procedures and data points that provide useful forecasting information for cities along the coast and areas of freshwater reserves such as public reservoirs. This information on HAB strength and proximity is of vital interest to those charged with responding quickly and appropriately to toxic blooms in Lake Erie. The causes of the toxic algal bloom will not abate in the near future.

This latest collaboration by NASA GRC, on monitoring HAB, builds on previous work with NOAA using Hyperspectral Imaging (HSI) and concurrent water sampling. The higher spatial and spectral resolution provided through this technology aids in detecting HAB in very low concentrations and in identifying changes in concentration and location over reduced time frames. The NASA GRC team continues to fine-tune this technology and the procedures related to its use in conjunction with the agency's research partners.

The importance of this program to our region, to the Great Lakes system as a whole, and many other places worldwide where water contaminants are a threat, substantiates this program's timely renewal. We respectfully urge full funding and technical support to advance scientific understanding and drinking water protection through the Remote Sensing of Harmful Algal Blooms (HAB) in Lake Erie program.

Sincerely,

MARCY KAPTUR
Member of Congress

BOB LATTA
Member of Congress

DAVID JOYCE
Member of Congress

ROB PORTMAN
U.S. Senator

SHERROD BROWN
U.S. Senator